

In the Abstract:

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ABSTRACT

Embodiments of this invention include methods for increasing the amount of the enzyme tyrosine hydroxylase (TH) in the central nervous system (CNS) of mammals in need of an increase in TH. Methods include the use of the tripeptide, gly-pro-glu (GPE) to increase TH in the CNS. GPE can increase the amount of TH and/or decrease the loss of TH in conditions characterized by a loss of dopamine, such as Parkinson's disease and CNS injury. GPE may act to increase the expression of TH or by inhibiting a decrease in TH expression within the CNS or by inhibiting the loss of TH-containing neurons within the CNS. By increasing the amounts of TH in the CNS, GPE can increase the amount of the neurotransmitter, dopamine, in areas of the CNS responsible for adverse symptoms of neural injury or disease.